

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
29 March 2001 (29.03.2001)

PCT

(10) International Publication Number  
**WO 01/22411 A1**

(51) International Patent Classification<sup>7</sup>: G11B 5/852,  
G06K 19/06

Richard, Miller [GB/GB]; Romsey, Hardenhuish Lane,  
Chippenham, Wiltshire SN14 6HS (GB). SMITH,  
Andrew, Laurence [GB/GB]; Broxa, Hedgerley Hill,  
Hedgerley, Slough SL2 3RW (GB).

(21) International Application Number: PCT/GB00/03634

(22) International Filing Date:  
22 September 2000 (22.09.2000)

(74) Agent: SHARP, Alan, Cooper; QED I.P. Services Lim-  
ited, Dawley Road, Hayes, Middlesex UB3 1HH (GB).

(25) Filing Language: English

(81) Designated States (*national*): BR, CA, CN, GB, JP, KR,  
MX, US.

(26) Publication Language: English

(30) Priority Data:  
9922516.1 24 September 1999 (24.09.1999) GB

(84) Designated States (*regional*): European patent (AT, BE,  
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,  
NL, PT, SE).

(71) Applicant (*for all designated States except US*): THORN  
SECURE SCIENCE LIMITED [GB/GB]; Rutland  
House, Hargreaves Road, Groundwell Industrial Estate,  
Swindon, Wiltshire SN2 5AZ (GB).

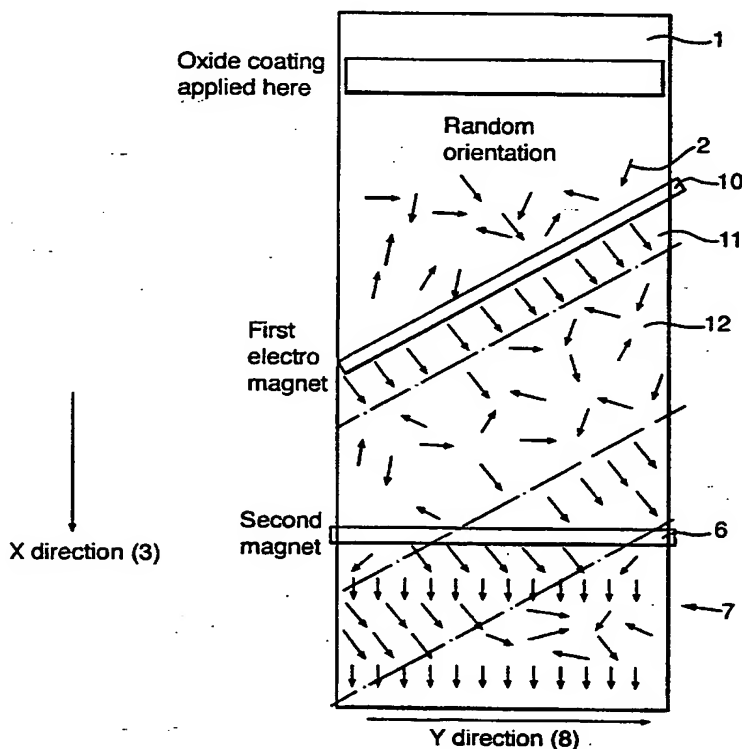
Published:  
— With international search report.

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): WALTHAM,

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: A METHOD OF MANUFACTURING FLEXIBLE MAGNETIC TAPE



(57) Abstract: A method of manufacturing flexible magnetic tape having a permanently structured magnetic characteristic which varies from place to place in two different directions in the plane of the tape, includes: a) coating a flexible substrate with a slurry comprising anisotropic magnetic particles; b) moving the substrate and slurry coating relative to a first magnetic field having a field strength which varies with time in a first direction, thereby selectively orienting the said particles in areas spaced apart in a first direction; c) subsequently moving the substrate and slurry coating relative to a second magnetic field having a field strength which varies with time in a second direction making an oblique angle with the first direction, such that the said magnetic particles are selectively oriented in spaced areas in both said first and said further directions, and d) solidifying the slurry to fix the said particles in place.

WO 01/22411 A1